

## Abstract of the Disclosure

A magnetic tape includes: a back coating layer containing a carbon black; a support; a non-magnetic layer containing a non-magnetic powder and a binder, which is substantially non-magnetic; and a magnetic layer containing a ferromagnetic powder and a binder, in this order, wherein the magnetic tape is a magnetic tape for recording a signal with a 10 to 100 Mbit/cm<sup>2</sup> surface recording density; the magnetic tape has a temperature expansion coefficient in a width direction thereof of a 0.0015%/°C or less, a humidity expansion coefficient of 0.0015%/RH or less, an offset yield strength in a longitudinal direction thereof of 10N or more, a rupture strength of 30 N or more; and the support has a center plane average roughness on a coating surface side of the magnetic layer of 1.0 nm or less, a center plane average roughness on a coating surface side of the back coating layer of 3.0 to 9.0 nm, and projections having a 273 nm or more height existing on the coating surface side of the magnetic layer of 10 pieces/100 cm<sup>2</sup> or less.